

What is claimed is:

1. A method for outputting A/V streams onto a screen in response to a user's request by a home network which includes a server for outputting audio/video streams and plural renderers connected to the server through a home network, comprising:

a step in which a renderer connected to a server requests A/V streams;

a step in which the server judges whether A/V streams can be outputted in response to the request from the renderer; and

a step in which the server provides the A/V streams to the renderer sequentially or simultaneously if the A/V stream can be outputted, or outputting a server unavailability message to the renderer if the server judges that the A/V streams can not be outputted.

2. The method of claim 1, wherein, in the step of judging whether A/V streams can be outputted, the server compares transmission time of entire A/V streams and A/V stream transmission time according to a defined reproduction capability of the server required for reproducing A/V streams, and then judges whether the A/V streams can be outputted.

3. The method of claim 2, wherein if the server's transmission time is slower than the defined transmission time, the server transfers a server unavailability message to the renderer.

4. The method of claim 2, wherein the A/V stream transmission time

is time taken for the header to simultaneously read A/V streams stored in a storing medium and output them.

5        5.        The method of claim 2, wherein the A/V stream transmission time signifies total amount of time obtained by adding the a seek time taken for the header to move to an address where the A/V stream is positioned, a head activation time taken for the header to select a track in which the A/V stream is stored, a rotation latency time taken for the header to be positioned at a desired sector, and a time taken for the A/V stream read through the header to be  
10 transferred to the memory.

6.        The method of claim 1, wherein, in the step of judging whether A/V streams can be outputted, the server compares the overall transfer rate of the A/V streams being reproduced and a predetermined A/V stream transfer rate on  
15 the basis of the distance between a position where the A/V stream requested by the renderer has been recorded and a position where the A/V stream being reproduced has been recorded.

7.        The method of claim 6, wherein the server judges a time point  
20 where the overall transfer rate for the current reproduction becomes slower than the predetermined transfer rate, and transfers the server unavailability message sequentially or simultaneously to connected renderers.

8.        The method of claim 1, wherein, in the step of judging whether  
25 A/V streams can be outputted, a reproduction processing capability of the server

including a CPU and a memory is judged.

9. The method of claim 1, wherein, in the step of judging whether A/V streams can be outputted, the number of A/V streams that can be finally  
5 outputted is judged on the basis of the lowest reference of the header movement speed, header reading speed and the server's reproduction processing capability, in order to determine whether to transfer the server unavailability message.

10. The method of claim 1, wherein, in the step of outputting the  
10 server unavailability message, if some plural renderers are additionally connected to the server and request A/V streams, the A/V streams are transferred from the server to the renderers in order of the plural renderers' stream transmission request. From a time point when server judges transmission of audio/video streams is not possible, the server outputs the server unavailability message to a  
15 renderer which has requested the A/V streams.

11. The method of claim 1, wherein the server is a medium reproducing unit for reproducing an optical recording medium, a hard disk medium or a medium including the optical recording medium and the hard disk medium.

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12. The method of claim 11, wherein the medium reproducing unit reads A/V streams stored in certain positions of the recording medium through at least one or more headers performing a mechanical position movement.

25 13. The method of claim 1, wherein the renderer is a display unit for

outputting A/V streams provided from the server on a screen.

14. The method of claim 1, wherein the home network is a cable communication network on the basis of ethernet or home PNA, IEEE1394.

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15. The method of claim 1, wherein the home network is a wireless communication network on the basis of a bluetooth, Wireless1394, HomeRF.